### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application No. 10/553,118

Applicant: Shinohara et al.

Filed: March 31, 2004 (PCT filing date)

TC/AU: Unassigned

Examiner: Unassigned

Docket No.: 239188 (Client Reference No. Tak-201405)

Customer No.: 23460

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

within any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date

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		rst Office Action on the merits; or (d) before the mailing of a first Office Action he filing of a request for continued examination under 37 CFR 1.114.
	37 CF	(a), (b), (c) or (d) above, but before the mailing date of a final action under R 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that vise closes prosecution in the application, and includes <i>one</i> of:
		the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).
	$\Box$	the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).
	under and on 37 CF	the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance 37 CFR 1.311, or an action that otherwise closes prosecution in the application, a or before payment of the issue fee, and includes the Statement under R 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as th in 37 CFR 1.17(p) (see "Fees" below).
	payme contain 37 CF: \$180 a NOTE: May 29	the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before ent of the issue fee, and within thirty days of receiving each item of information ned in the Information Disclosure Statement, and includes the Statement under R 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of as set forth in 37 CFR 1.17(p) (see "Fees" below).  This is for original applications except applications for a design patent, filed on or after 1,2000, wherein a paper containing only an Information Disclosure Statement in compliance CFR 1.97 and 1.98 is being filed.
Copie	s of the	References
$\boxtimes$	Copies herewi	s of all of the references listed on the enclosed Form 1449 are enclosed ith.
	Form	s of U.S. patents and patent applications that are listed on the accompanying 1449 are not enclosed herewith. Copies of other references identified on the panying Form 1449 are enclosed herewith.
$\boxtimes$	relevan an Eng action degree	ted to each reference not in the English language is a concise explanation of the nce pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or glish-language abstract, or an English-language version of the search report or by a foreign patent office in a counterpart foreign application indicating the of relevance found by the foreign office is being submitted in lieu of a concise lation of the relevance pursuant to 37 CFR 1.98(a)(3).
$\boxtimes$	A copy	y of the foreign search report is enclosed herewith.
	parent	ferences listed on the enclosed Form 1449 were previously identified in the application(s) of the present application, and copies of the references were need at that time. Accordingly, additional copies of the references are not

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submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

U.S. APPLI	CATIONS	S <sup>-</sup>	TATUS (check o	one)
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2.				
3.				

## Statement under 37 CFR 1.97(e)

$\boxtimes$	The <b>undersigned</b> hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
	The <b>undersigned</b> hereby states that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.
State	ment under 37 CFR 1.704(d)
	The <b>undersigned</b> hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
Fees	
	No fee is owed by the applicant(s). Charge Deposit Account No. 12-1216 in the amount of \$180.00 (37 CFR 1.17(p)). (A duplicate copy of this communication is enclosed for that purpose.)

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Authorization to Charge Additiona	u Fe	es
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If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)

## **Instructions as to Overpayment**

$\boxtimes$	Credit Account No.	12-1216.
	Refund	

John Kily, Jr., Reg. No. 30/763 LEVDIG, VOIT & MAYER, LTD. Two Prudential Plaza, Suite 4900 180 North Stetson Avenue Chicago, Illinois 60601-6780 (312) 616-5600 (telephone)

(312) 616-5700 (facsimile)

Date: January 11, 2006

MAI	LING/TRANSMISSION CERTIFICA	TE UNDER 37 C	FR 1.8 OR 1.10					
I hereby certify that this document and all accompanying documents are, on the date indicated below, being  deposited with the U.S. Postal Service using "Express Mail" service in an envelope addressed in the same manner indicated on this document with Express Mail Label Number EV 419251562 US.								
Name (Print/Type)	John Kilyk, Jr.							
Signature	John Klale f.	Date	January 11, 2006					

IDS (Revised 2005 08 01)

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Substitute for form 1449A/B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	1

	Complete if Known
Application Number	10/553,118
Filing Date	March 31, 2004
First Named Inventor	Shinohara et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	239188
Client Reference No.	Tak-201405

			U.	S. PATENT DOCUMENTS		
		U.S. Patent Do	cument			
Examiner Initials	Doc. No.	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
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				FOREIGN	N PATENT DOCUMENTS			
				Foreign Patent Document			Trans	slation
Examiner Initials	Doc. No.	Office	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Yes	No*+
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		OTHER - NON PATENT LITERATURE DOCUMENTS  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item	Trans	lation
Examiner Initials	Doc. No.	(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Yes	No*+
	AA	BRINSTER et al., Proc. Natl. Acad. Sci. USA, 91: 11298-11302 (1994)		
	ΑB	FENG et al., Science, 297: 392-395 (2002)		
	AC	HASTHORPE et al., J. Reproduction and Fertility, 119: 85-91 (2000)		
	ΑD	IZADYAR et al., Biology of Reproduction, 68: 272-281 (2003)		
	ΑE	KANATSU-SHINOHARA et al., Biology of Reproduction, 69: 612-616 (2003)		
	AF	MENG et al., Science, 287: 1489-1493 (2000)		
	AG	MIYASAKA et al., Life Science Shiko Zaidan Nenpo, Heisei 14 Nenban, 17-19 (2003)	+	
	АН	NAGANO et al., Tissue & Cell, 30(4): 389-397 (1998)		
	ΑI	NAGANO et al., FEBS Lett., 475: 7-10 (2000)		
	ΑJ	NAGANO et al., Proc. Natl. Acad. Sci. USA, 98(23): 13090-13095 (2001)		
	AK	NAGANO et al., Biology of Reproduction, 68: 2207-2214 (2003)		
	ΑL	ORWIG et al., Biology of Reproduction, 67: 874-879 (2002)		
	AM	SARIOLA, Cell. Mol. Life Sci., 58(8): 1061-1066 (2001)	,	
	AN	SHINOHARA et al., Gendai Kagaku Zokan 41 Saisei Igaku Saisei Iryo, 24-28 (2002)	+	
	AO	VAN PELT et al., Endocrinology, 143(5): 1845-1850 (2002)		

Examiner Signature	Date Considered		
	l e	†	

<sup>\*</sup> A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

<sup>+</sup> An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).